# Credit Model Task Force Majority Report March 2008

**History**: During the 2006-2007 academic year a Credit Model Working Group (CMWG) came together to discuss the matter of converting from a 3-credit model to a 4-credit model at Plymouth State University. The working group was comprised of faculty representatives from a variety of departments but not all departments. Participant perspectives of the working group included opposed, uncertain, neutral, and in support of changing to a four-credit system. All departments and perspectives were invited to participate by exploring current research, philosophies, and trends in higher education related to credit models, credit hours, contact hours, and other course-based approaches. The CMWG accumulated ten signatures and requested the Steering Committee create a task force with representatives from every department to investigate the issue further.

# **Original Charge:**

- investigate the pros and cons of switching to a four-credit or non-credit-hour system
- investigate various credit model systems
- investigate the pros and cons of various curriculum delivery systems
- investigate the impact on students, faculty, curriculum, departments, and university resources (financial, human, and physical space).
- Present recommendations (whether it entail a change of credit systems or not) to present to the faculty by the March faculty meeting

The Credit Model Task Force (CMTF) convened in October 2007 with faculty representatives from 13 departments, including one student representative appointed by the Student Senate.

**Task Force Members**: Ann McClellan (Chair, English), Annette Holba (Communications & Media Studies), Robert Miller (Education), Phil Lonergan (Art), Helen O'Brien (Social Work), Deborah John (HHP), Holly Oliver (Music, Theater, and Dance), Christian Roberson (Computer Science), Dennis Machnik (CEAPS), Natalya Vinogradova (Math), John Kulig (Psychology), Stephanie Halter (Criminal Justice), and Bob Egbert (Social Science); Student Representative: Derek Birch.

We will report our findings at the March 2008 Faculty Meeting and will ask for a full Faculty vote on this issue at the April Faculty meeting.

In order to address chronic problems of faculty and student intellectual fatigue, improve faculty hiring and retention, and enable students to be more productive and deep learners; to distinguish PSU from other institutions and align PSU with the rest of the USNH system; and to allow for a greater degree of faculty-student interactions characteristic of elite institutions, we investigated several possible approaches to the way in which PSU structures faculty and student course loads:

1) a full course load for faculty should be six courses per year; a course load for a full-time student should be eight courses per year. Course credits should not be linked to contact time.

This proposal could be achieved by converting all current 3-credit courses to four-credits without extending contact times, and making a full-time student's course load be 16 credits instead of 15.

- 2) In addition to 1 above, we could also move to a "course credit" model, in which each course counts for one credit, whether it is in foreign languages, math, secondary education, or biology, etc.
- 3) We could also convert to a four-credit (course credit model or regular credit) system and tie credits to contact time.
- 4) We could let individual departments make a decision on how they will count courses and credits. There is some precedent for this (see 1 under MODELS), and while logistically this might be difficult because of dramatic differences among departments in how a teaching load and credits are counted, a certain amount of variability already exists at PSU in any case.
- 5) We could leave the current system in place.

In order to achieve the desired result in either of these models, students should be PREVENTED (except with Dean approval) from taking more than four four-credit courses in a semester.

#### **RECOMMENDATION:**

It is the majority opinion (8/5/0) of the Credit Model Task Force that PSU change from the current credit model system that offers 1, 2, 3 and 4-credit courses to a 4-credit model system that offers 1, 2, and 4-credit courses with the 4-credit course being the standard across the curriculum. Students would take sixteen credits per semester and faculty would teach three courses each semester (6 courses per year). Each course would require a minimum of 180-200 in-class clock minutes per week with additional learning experiences to be determined by the department offering the course.

The committee further recommends an implementation team be assembled with sufficient release time, a timetable for implementation be developed, and an ongoing assessment of the change to a 4-credit model be conducted.

The committee also recommends that the Chief Financial Officer be consulted to provide financial models to support this proposal.

**Rationale**: After a systematic review of the current literature regarding this shift and after meeting with three other institutions (two of which are PSU comparators) that have already changed from a 3-credit model to a 4-credit model it is the majority opinion of the CMTF that we support the change to a 4-credit model system. This is a majority opinion of the taskforce. The issue did not receive a unanimous vote. We do not suggest that there are no disadvantages to changing credit model systems but there are significant advantages that outweigh perceived disadvantages. This proposal presents both sides of the issue as fair representation of perspectives.

#### **IMPLICATIONS**

- 1) Faculty will have a more reasonable teaching load, which will not be inconsistent with many other teaching institutions.
- 2) Students will be expected to take 4 courses most semesters, which according to most professors' self-proclaimed standards, equals 50 hours of work per week, in addition to whatever work or work-study the student may have.
- 3) Because course loads have been reduced and standardized within a consistent block schedule, scheduling problems will be eased.
- 4) Common meeting times will be more easily created and maintained.
- 5) Expectations of students will rise because of increased focus and more time-on-task for individual courses.
- 6) Potentials for collaborative learning will be enhanced by longer class periods and the possibility of more in-depth out of class learning like service learning projects, outreach, and field research.
- 7) Potentials for research, experiential learning and service learning will be enhanced.
- 8) Coherence in student programs will result (as reported by UMF about Wagner College).
- 9) Course credit systems or 4-credit courses will allow for great variety in alternative schedules (e.g. modules, experiential learning, service-learning, etc.)
- 10) Course compression: some departments may decide to compress some courses from two semesters to one because students will be taking fewer classes overall, or faculty will have to redesign courses and content coverage to meet current needs.
- 11) Course loss: some courses will be lost, as majors are rethought. A course major might become an 8 course major as opposed to a 12 course major, with some of the material from the 3 lost courses folded into the remaining 8.
- 12) Majors might have to be reconceptualized.
- 13) All (or most) course descriptions would have to be revised, and all (or most) syllabi will have to be revised.
- 14) The increased academic expectations and seat time may result in a loss of some students who may choose a less rigorous academic environment.

- 15) Conversion will require at least one year of thoughtful deliberation with release time and additional resources for those facilitating the shift, which will result in additional financial demand on the institution.
- 16) Reviewing equivalencies for transfer credit will be initially time consuming, but not impossible.
- 17) Faculty inertia will be difficult to overcome.
- 18) The relationship between the General Education and major courses will have to be rethought in order to insure that the proportion of general education courses and majors remains similar.

#### **OUR RESEARCH PROCESS**

**Regarding the 3- vs. 4-Credit Question:** The Task Force read and evaluated related data on credit models, the relationship between courses/credits taken and student academic achievement, the philosophy and pedagogy of credit models, accreditation, seat time, possible connections to technology related pedagogies, etc. We have included a list of relevant sources and links at the end of this document. In addition, our investigation and this document relies heavily on the work done by the 2006-7 Credit Model Working Group and our comparator institutions at Keene State College, St. Joseph's College, and the University of Maine-Farmington (See acknowledgements at the end of this document). Much of the information used here was taken from resources provided by these institutions, all of which are available either online, as links, or at the library.

# Report on the Credit Model and Seat Time

This report is part of the larger effort to investigate ideas pertaining to the credit model and seat time in higher education. The focus of this inquiry was originally designated as seat time. However, it became apparent that seat time should not be considered separately from the credit model, as the two concepts have a long-standing history and connection.

Questions that propelled this inquiry:

- What is the credit hour?
- What is the purpose of the credit hour?
- How is seat time related to the credit hour?
- What is the current conceptualization of seat time in US higher education?
- What are the advantages of changing from a 3-credit model to a 4-credit model?
- What are the disadvantages of a credit hour system?
- What is the current discussion/climate/research pertaining to credit hours in higher education?

#### • What is the credit hour?

The credit hour initially developed as a common unit of measurement designed to measure student learning and faculty workload (Wellman and Ehrlich, 2003). Prior to this adaptation to higher education, the credit hour was designed by college admissions departments to translate high school work for college admissions assessment (Shedd, 2003a). The credit hour has been described as a business model of measurement applied to document intellectual productivity (the first inherent problem with the credit model system).

# • What is the purpose of the credit hour?

Historically, the credit model was a tool of measurement utilized to make a business decision in the modern era. Today, the credit model remains a business tool that is designed to function as a unit of standard measurement but many institutions do not define what it is or what it means to the student or faculty. As a result, there is a nebulous understanding of its purpose and relevancy for many individuals and institutions (Shedd, 2003b).

Ehrlich (2003b) tells us that measuring faculty contact hours by the credit model system initially allowed administrative offices to equally assess learning outcomes across disciplines, which could be described as comparing apples and oranges in educational approaches. This system worked as a common language and worked well in the modern historical moment when the 50 minute hour, meeting three times per week, dominated higher education. But as instruction became more varied in all dimensions this application of the credit hour as a metric unit of universal measurement has become more arbitrary. Thus, one question that is now being asked is, since the way we learn has changed so much does this render the credit model anachronistic?

#### • How is seat time related to the credit hour?

Seat time is one way of measuring learning across disciplines-according to administrative departments. Traditional educational approaches to higher education have been based upon the lecture model – or the teaching/professing paradigm. Seat time refers to the amount of time a student sits in a class. This measures how much time a student is supposed to be in class but it cannot measure any learning outcomes – some argue that to measure learning outcomes we must not be wed to the idea of 'putting in time' or meeting the bottom line. The relationship between seat time and learning is spurious (at best) and one does not automatically correlate to the other. Yet, from a business perspective seat time does provide some standard unit of measurement that tells part of the story. Even with this problem noted in higher education literature, the credit hour is becoming an influential lever of institutional policy, perhaps because of the ease it allows in connecting financial accountability to students or hours taught.

Increased seat time should no longer be a measurable outcome for any reconceptualization of the credit-hour models. Seat time is out of date and with the advent and proliferation of new technologies, online courses, and distance education, the traditional credit hour, and thus the concept of seat-time, has become obsolete (Shedd, 2003b).

#### • What is the current conceptualization of seat-time in US higher education?

Institutional habits about use of time are less flexible than for recording student learning (Shedd, 2003b, p.29). By being married to the concept of seat time, we lose the ability to be flexible in our assessment of learning. Because disciplines vary in nature there should be a variety of measurements designed to assess learning. But there is an overwhelming focus on the concept of 'seat-time' which propels "sameness" (Shedd, 2003b, p. 30). The idea of "sameness" allows for the business/practical side of higher education to measure apples and oranges and come up with one bottom line. However, Shedd (2003b) argues the idea of "sameness" in assessment approaches across disciplines is not a realistic and appropriate measurement tool.

Dr. Vilma Concha-Chiaraviglio (2003), of Meredith College in North Carolina, does not use seat time to assess foreign language competency. Students must pass a competency exam not related to any required seat-time. Watkins and Scholsser (2003) argue that technology has changed the way we should conceptualize seat-time. Castner (1993) suggests we should rethink seat time to a Mastery level. Mizell and Centini (1985) suggest that technology has already reshaped the notion of seat-time. The date of their claim is interesting because we are 20 years beyond that time of Mizell and Centini and still talking about the need to shift how we think about seat time.

Is there a shift or trend in higher education that represents a new way of thinking about seattime? Technologies are forcing the issue. While there is not a massive exodus away from seattime as a form of measurement, it still is predominant at most institutions primarily because it is easier to pragmatically negotiate issues of measurement, transfer, and graduation.

• What are the advantages of changing from a 3-credit model to a 4-credit model?

Some studies argue (Ehrlich, 2003b) that 3-credit systems suppress innovation in teaching/learning because the 3-credit system is married to the lecture paradigm (Shedd, 2003b). Ehrlich (2003b) suggests that moving to a 4-credit model or away from the credit model in general (especially one that is married to seat-time) can invite innovation in teaching, such as:

- Interdisciplinary teaching
- o Team teaching
- o Supervising students with service learning
- o More experimentation with technology

Ehrlich also suggests that teaching 4 courses a semester gives little time for this kind of innovation and little time for faculty to engage research. The argument that research can enhance teaching is well established in the research literature in higher education (Rice, 2002; Taylor and Rafferty, 2003; Ramsden, 1992; Hutchings, 2003, Brown, 2005). Additionally, the idea that teaching and research are mutually exclusive is ludicrous as well. Studies show that teaching and research are partners – both complementing the other (Brown, 2003; Boyer, 1992). In fact, without research, there is a risk for college/university teachers (public intellectuals) to become anachronistic if research is not in some way a part of one's teaching experience.

# • What are the disadvantages of a credit hour system?

The credit model was a tool designed "for another time" and it was based on a mechanical system from the industrial era (Wellman and Ehrlich, 2003), yet it is still used as a measurement of classroom time today. A credit model counts 'time,' not learning outcomes. It has become embedded in regulatory systems in higher education in the US (Wellman and Ehrlich, 2003).

Changing to a different model (either a 4-credit model OR any other reconceptualization of a model that actually does measure learning outcomes) will be time consuming and cause curricula to be reworked (overhauled in some cases). Faculty will need to repackage individual course preps, departmental course requirements, and people will simply have to change their routine. Additionally, the issue of seat-time will mean different things to different departments, making assessment more challenging from a business perspective, however, more accurate from an intellectual perspective.

# • What is the current discussion/climate/research pertaining to credit hours in higher education?

Currently, there are institutions questioning the value and relevancy of the credit model in the postmodern era of education (Ehrlich, 2003b). These studies report on the varying approaches by other institutions and the currency of reconceptualizing the credit-hour model. The challenge of using a business approach to measure intellectual growth and then basing the whole of the intellectual system upon that business oriented approach seems inadequate, inappropriate, and incomplete.

The National Center on Higher Education Research has suggested that "a fundamental shift may be under way in the realm of faculty workload, a shift that cannot be accommodated by the credit-hour metric, at least without significant modifications" (Ehrlich, 2003b). Changes in higher education that are calling for a revisiting of the credit-model include:

- Class size (an increase due to the commercialization of higher education)
- o Technologies (reshaping 'time' and how teaching/learning happens)
- The shift from professing paradigm to a learning paradigm where learning outcomes are privileged not teaching strategies.

Ehrlich (2003b) argues that one of the problems currently facing the academy is the idea that faculty workload is often defined in relation to class size and class size is often impacted by credit hour and the number of seats available in a particular class. As a result of thinking about faculty workload related to credit-hours, innovation is seriously restricted or impeded (Ehrlich, 2003a). Some argue that the credit-model system alone impedes instructional innovation (and simply makes faculty unwilling to change or rethink approaches in their curriculum).

This report should be considered in conjunction with the Report on the Credit Model submitted by Robin Bowers, April 2006, for the English Department.

## Sources for the Credit Model Report on Seat Time

- Boyer, E. L. (1992). Scholarship reconsidered: Priorities of the professoriate. *Issues in Accounting Education*. 7(1), 89-91.
- Brown, R. B. (2005). Why link personal research and teaching? *Education & Training*. 47(6), 393-407.
- Castner, K. (1993). Moving from seat time to mastery: One district's system. *Educational Leadership*. 51(1), 45-47, 50.
- Concha-Chiaraviglio, V. (2003). Towards communicative competency: Matching teaching and testing. Paper presented at the Annual Meeting of the Foreign Language Association of North Carolina, (ERIC: ED493183).
- Ehrlich, T. (2003a). The credit hour as a potential barrier to innovation: Lessons from innovative institutions. *New Directions for Higher Education*. 2003(122), 31-43.

- Ehrlich, T. (2003b). The credit hour and faculty instructional workload. *New Directions for Higher Education*. 2003(122), 45-55.
- Hutchings, P. (2003). The scholarship of teaching and learning in communication: A few words from the Carnegie academy. Communication Education. 52(1), 57-59.
- Mizelli, A. P., Centini, B. (1985). *The electronic classroom*. Paper presented at the Annual Florida Instructional Computing Conference (5th, Orlando, FL, January 28-31, 1985).
- Ramsden, P. Moses, I. (1992). Associations between research and teaching in Australian higher education. *Higher Education*. 23(3), 273-295.
- Rice, R. E. (2002). Beyond scholarship reconsidered: Toward an enlarged vision of the scholarly work of faculty members. *New Directions for Teaching and Learning*. 90, 7-16.
- Shedd, J. (2003a). The history of the student credit hour. *New Directions for Higher Education*. 2003(122), 5-12.
- Shedd, J. (2003b). Policies and practices in enforcing the credit hour. *New Directions in Higher Education*. 2003(122), 13-30.
- Taylor, I. J. Rafferty. (2003). Integrating research and teaching in social work: Building a strong partnership. *Social Work Education*. 22(6), 589-602.
- Watkins, R., Schlosser, C. (2003). It's not about time: A fresh approach to educational equivalency. *Tech Trends*. 47(3), 35-40.
- Wellman, J. (2005). The student credit hour: Counting what counts. *Change*. 37(4), 18-23.
- Wellman, J. V., Ehrlich, T. (2003). The credit hour: The tie that binds. *New Directions for Higher Education*. 2003(122), 119-122.
- \*\*Many of these articles came from *New Directions for Higher Education* vol. 2003, issue 122. This is an issue devoted to the credit model in higher education. While this is not an exhaustive list of the essays, it is representative of the entire issue theme and most significant to our questions.

In addition to our research on the history of the credit hour and seat time, UMF included similar (yet more dated) research in their report:

"As early as 1974, Vargas argues that the credit hour is an anachronism. The credit hour model indicates only the amount of exposure not the amount of learning. This traditional model rewards faculty who stay in lecture mode thus providing a disincentive to faculty to be creative in their teaching. In addition, five assumptions served as the basis for the awarding of credit hours (Bradbury, 1982): Learners start at the same place in terms of their incoming knowledge and skills, learning results only from classes taken, learning can be assessed quantitatively by hours spent in class per week, learning can be assessed qualitatively by the grade given, and graduation is a function of credits earned. There is no evidence to suggest that these assumptions are true. Furthermore, Lewis (1961) suggested that formal class-hour requirements had already become flexible back in the '60s with the introduction of independent studies, credit by examination (CLEP, AP, etc.), and comprehensive examinations. Other credit hour variations include correspondence/TV/computer courses and credit for travel abroad (Grose, 1979). Both Vargas (1974) and Grose (1979) urged universities to focus on output or competency (i.e., learning to some criterion) rather than input (number of hours spent in the classroom). Munson (1990) indicated that a "course unit" system is more representative of amount learned rather than time spent.

The key to the credit hour question seems to be the balancing of responsiveness to students with academic integrity (James, 1999). James felt that such responsiveness would work best when faculty are not constrained by departments and academic "Territories." He indicated that three things are needed to facilitate change in the structure of a university's curriculum: job assurance and adequate training in new educational methodologies, rewards for faculty creativity and innovation, institutional support for academic experimentation even if some experiments fail. In addition, Bradbury (1982) identified four specific problems that need to be addressed in a change to innovation in course structuring: Defining full-time student status, defining faculty workload, defining academic credit, coming up with a new funding formula" (<u>UMF 2001 Proposal Website</u>)."

UMF also references a parallel study (Duby and Schartman, 1997) done at two Michigan universities which connected the credit hour load of first semester students to GPA, retention, time to degree and "negatively related to debt accrued." Specifically, Duby and Schartman found that students taking 16 rather than 12 credit hours performed better; thus, "the researchers believed that the number of credit hours represented commitment to education" (UMF 2001 Proposal Website). In his report to the CMTF, PSU's Scott Mantie corroborated that the average PSU student is taking less than 15 credit hours per semester (See link at end of document).

Ultimately, while the research groups at regional four-credit institutions (Keene, St. Joseph's, UMF) recommended changing from a traditional 'credit hour' system to a 'course unit' system, every school ultimately went with a four-credit system in order to insure equity within courses and majors, to standardize seat time, and to facilitate transferring credit for students both into and out of the university.

**Regional Four-Credit Institutions**: We did not do this research alone. UMF had completed substantial comparator research before switching to 4-credits, which was influential for our decision as well. UMF talked with Academic officers (present and former) from 13 institutions, which were COPLAC, private, or other public schools and found several features common to nearly all:

- 1) Faculty and student workloads motivated the change.
- 2) Institutions who had changed to a four-credit model would never return to a 3-credit model.
- 3) Time was needed to implement the change ranging from one to three years.
- 4) No official assessments of the impact of change had been done.
- 5) No research data regarding differential effectiveness was available.

**Models**: UMF found a wide variety of models in their research, although no two schools had exactly the same model. Some options are these:

- 1) Mix of 3 and 4-credit courses (Fort Lewis, Randolph Macon)
- 2) Each department decides on how to count courses (Fort Lewis)
- 3) Flat rate tuition an important aspect of the change (Ohio Northern, Wagner, Fort Lewis, Univ. of Minnesota-Morris, New Century College, Susquehanna, Wartburg, Elon)
- 4) Course credit system (Wartburg, Wagner, New Century College [an odd mix of course credits and regular credits]
- 5) Credits <u>not</u> tied to contact time (UM-Morris, Colby); some institutions are very tied to contact time (Fort Lewis, Elon), and others seem to have a more fluid relationship (New Century, Randolph Macon).

In addition, PSU's Mary Campbell identified the following institutions using a 4-credit model:

- Boston University
- Bucknell University
- Clark University
- Drew University
- Keene State College
- New York University
- Susquehanna University
- Tufts University
- University of New Hampshire
- University of the Redlands
- University of Southern California
- University of Tampa

Members of the PSU Task Force visited three regional colleges and universities that had recently made the shift to 4 credits in order to gather additional anecdotal, experiential, and assessment research (DVD recordings of these visits are available on reserve at the library).

# Summary of Visit to Keene State College Date of Visit: January 15, 2008

On January 15<sup>th</sup>, Ann McClellan, John Kulig and Phil Lonergan of the Credit Model Task Force visited Keene to learn more about their experience moving to a 4-credit model. This is an overview of Keene's experience based on conversations with VPAA Emile (Mel) Netzhammer and faculty member Gregory Knouff (Chair of History) and materials they provided us (See PDF attachment). Keene undertook a study of the switch to a 4-credit model upon the suggestion of their administration in 2004. A 4-credit model was approved by the faculty in 2005, and after a two year implementation plan the curriculum was changed in the spring of 2007. This is an overview of Keene's 4-credit model:

- O While no one issue precipitated the shift from a 3-credit to a 4-credit model, nearly everyone believed the main benefit was the opportunity for students and faculty to focus on fewer topics. In their model, students were expected to enroll in 4 classes, and faculty teach 3<sup>1</sup> per semester.
- O Their model assumes that the switch to 4 credits entails more than just an increase in inclass time and more than a simple increase in coverage. They expected the revised classes to be qualitatively more rigorous as well. They increased in-class time by 50%, rather than the 33% expected if in-class time increased proportionately with the increase in credits. Some details of their implemented model are as follows.
  - o Most classes meet only twice a week (M and W, or, T and R), for 110 minutes each (220 minutes per class per week)<sup>2</sup>.
  - Very few classes meet on Friday
  - o The few remaining M W F classes meet for 75 minutes each time (225 minutes per class per week)
  - o Some classes meet once per week

The benefits and difficulties of the switch, as explained to us were as follows

o Benefits

• The faculty was invigorated by the change. One faculty member, who had applied for early retirement, withdrew his application.

o Parents liked the reduced number of classes and emphasis on depth.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Keene's union contract stipulates no more than two preparations, though they can choose to do more if they chose.

<sup>&</sup>lt;sup>2</sup> Note that even the advocates of the 4-credit model on the PSU Task Force are not advocating such a drastic and disproportionate increase in in-class time.

<sup>&</sup>lt;sup>3</sup> Keene also changed their Gen Ed program recently

- o Enrollments rose right after the curriculum was advertised (their target was 1125, and they ended up with 1301).
- o Retention between the spring and fall semesters was 81% (the usual rate is 75%).
- o The yield of admitted students has increased.
- o It is reported that recruiting faculty is easier.
- o The number of students per class has stayed the same.
- Accreditation has not been a problem.
- Even departments which had opposed the plan, such as education, made the switch successfully.

#### Costs

- The implementation process was a lot of work.
- Class length has been difficult for some students and some faculty (Keene increased seat time 50%; they told us it would have been better increasing it proportionally, or 33%).

#### Miscellaneous

- Some students opted to take 5 classes this year, even though only 4 is expected, which resulted in course cap issues, the number of sections/courses offered increasing, and unexpected increased short term costs.
- o In an effort to make the transition easier, the administration committed to 'student friendly' policies that support transitioning students in their work to graduate on time.

# Summary of Visit to St. Joseph's College, Maine

#### Date of Visit: Friday, January 28, 2008

On January 28, 2008, Ann McClellan, John Kulig and Dennis Machnik of the Credit Model Task Force visited St Joseph's college in Maine to learn more about their experience moving to a 4-credit model. This is an overview of their experience based on conversations with Daniel Sheridan (VPAA during the transition to the 4-credit model), David Roussel, Registrar/Assistant to the VPAA, and two faculty members.

St. Joseph's is a relatively small Catholic college just outside Portland, Maine, and has a balance of liberal arts & sciences programs (40%) and professional programs (60%). The SAT scores of the students are very close to average (a little over 1000 combined Verbal and Math). St Joseph's college undertook a study of the 4-credit model in October of 1998, and after approval by the faculty in the spring of 1999, implemented the plan in 2000.

## Rationale for their change:

The VPAA and some faculty members were concerned about the faculty workload (12 credit hours, 4 classes), some describing their job as similar to that of a high school teacher. Some faculty also wanted more time to pursue scholarship. The administration also wanted to see more scholarship among the faculty. The administration also wanted to be able to deliver their programs with more economy. They also believed that students of "average" ability could "wrap their head" around 4 topics much easier than 5 courses.

## The transition and a few details:

- Each department was asked to sketch out what their program would look like under a 4credit plan, and the General Education program was slightly revised.
- In the 4-credit system, their General Education program consists of 13 classes for a total of 58 credit hours (the Foreign Language requirement consists of 2, 3-credit classes, all others are 4-credits).
- o Majors were permitted up to 11 required classes.
- O During the transition period, students were permitted up to 20 credits without overload fees. Currently it is 19 credits.
- Departments did very little "repackaging" of courses (combining content from one course into another), as a few classes dropped down to 2 credits with most others increased to 4.
- o Their class schedule has MWF classes meet for 65 minutes each (65\*3 = 195 minutes) and their MW and TR classes meet for 105 minutes each (105\*2 = 210). A majority of their classes meet only twice a week.
- o It takes 128 credits to graduate (32 classes if all are 4 credits)

#### The benefits as reported to us:

o Faculty scholarship has increased (the administration initiated a bonus system that boosts base salary for publications. As to whether it was the increased scholarship was due to

reduction in classes or the bonuses, it was reported to us that these two changes were initiated at about the same time, and they made the switch to 4-credits to allow the faculty to do more scholarship).

- o The number of students being taught by an instructor is lower.
- Time to graduation did not increase
- o The graduation rate increased, first year retention increased to 80%, and they found it easier to recruit students.
- o Parents were pleased with the increased focus permitted by only 4 classes a semester
- o There is no talk amongst the faculty about returning to a 3 credit model
- The former VPAA ended the meeting by claiming that there are several ways to get faculty teaching load down to 3 courses, and this was the easiest and least expensive way to do it.

There were no drawbacks to the 4-credit model, as reported to us.

Aside: The people at St. Joseph's college did not mention a difficult transition (as was the case at Keene). Two possibilities: St. Joseph's had its departments sketch out curriculum changes as part of the process of studying the plan. Also, St. Joseph's seems to have a simpler curriculum.

# **Summary of University of Maine, Farmington (UMF)**

Date of visit: Friday, February 8, 2008

Attended: Phil Lonergan, Ann McClellan, Annette Holba

DVD of discussion will be available later next week after we receive it from UMF (at Library)

Department/Faculty representation from UMF: Natural Science, Biology, Early Childhood Education, English, Political Science, Special Education, Math/Computer Science, Music, Biology, Provost/Anthropology.

Conversation to change from a 3 credit system to a 4-credit system began in 1995. Faculty went to the Provost in 2000 with their discussion. Reasons:

- Students seemed "scattered" with taking 5 courses each semester
- Faculty were "scattered" teaching 4 courses each semester
- Faculty felt they had to water down courses so students could succeed
- Concerns over quality of education
- Faculty felt students and faculty were engaging "fragmented lives"
- Faculty desired to reduce fragmentation
- Studies show that there are advantages/benefits to student and faculty in a 4-credit system (referred to research obtained through the National Survey of Student Engagement [NSSE] \*Please note that UMF was included in NSSE 2006 annual report on Engaged Learning: Fostering Success for All Students)

## Issues since implementation:

- General Education Program and Electives impacted by switch minimally
- Teacher certification programs presented challenges because of the state's course mandated (rather than standards-based) curriculum, but they are working through them
- Increased contact minutes from 150 to 180-200 (range offers open discretion to faculty)
- Increased degree credits from 120 before implementation to 128 across all disciplines after implementation
- Transfers from community colleges accommodates/adjusts per course this creates flexibility in elective courses
- Required curriculum revision across campus
- Flexibility and innovation in scheduling courses (fewer conflicting class periods)
- Sciences made only few adjustments to course contact time and schedule
- Education Department developed innovative schedule blocks
- Classes reconceptualized pedagogically
- Initially Math Department felt advantages of the switch were vague and untestable but since implementation there are no concerns (they now support the change to 4-credits)
- No difference to students except night courses run later (6:15pm-9:45pm)
- They added their own constraints by adding a common time

#### Benefits:

- 1. Culture change students stay on campus on weekends due to more active involvement with campus life. Feels like a residential campus instead of a commuter campus.
- 2. Students more focused and calm (not scattered and fragmented as in the 3 credit model)
- 3. Faculty first year of transition was busy attention to advising
- 4. Benefits to faculty research as more undergraduates become involved
- 5. Administrative support 10 new faculty lines

#### **Frequently Asked Questions**

1. Why the proposal to switch to 4 credits? Why would this be a good move for the university?

The investigation into a four-credit system initially arose from faculty discussions about academic quality and providing a stronger academic experience for students. A previous PSU working group found that at other institutions concerns about student and faculty workload drove the switch to 4 credits. The assumption of the Credit Model Task Force is that a move to a four-credit system would increase academic standards and intellectual rigor by providing us an opportunity to rethink the entire curriculum and raise our expectations for student learning and intellectual engagement. We determined the following reasons, institutionally, for recommending this change:

- A) As a regional comprehensive university, the shift to a primarily four-credit system will allow us to better achieve our institutional mission to "prepare well-educated graduates, offer ongoing opportunities for graduate education and professional development and extend to communities partnership opportunities for cultural enrichment and economic development" (PSU mission). The increased focus as well as seat time will provide students with the time and attention needed to better learn and retain information learned in and out of the classroom. Because they will be taking four classes (rather than five or six), students will have more time and interest in engaging in professional internships, service learning projects, and field research activities.
- B) Central to our mission as a university is service to the community. A shift to a 4-credit model will allow us to further develop and extend our reach into the community across many levels. With increased focus within courses faculty will have greater flexibility to involve students in research, community outreach, volunteerism, community service, internships and field experiences.
- C) In addition to creating ways to provide a stronger and more rigorous academic experience, the switch to 4 credits may improve retention and may provide students with a clearer path to graduation by requiring fewer courses of them. A move to a four-credit system would also align PSU with the USNH system since **PSU is the ONLY USNH institution not on a four-credit curriculum**. The shift will make us more competitive as a quality choice for students in New Hampshire and may help us better fulfill our regional comprehensive university identity. Finally, a switch to 4 credits and a 4/4 workload for students would more closely match the PSU experience with the experience students find at nationally-ranked private liberal arts colleges.
- D) A shift to a 4-credit system will contribute to our university's mission to foster a climate of academic excellence and high quality. No one denies the significant work that went into the recent General Education revision, and many critics of the four-credit model note that we have not had time to assess the effectiveness of the program. Rather than a negative, however, this is a positive reason why moving to 4 credits at this time is so beneficial. Much of the hard work in revising the curriculum has already been done; a shift to 4 credits will allow the faculty to further refine and examine the General Education curriculum as well as introduce revised major

curricula across the institution. While admitting that the change required a lot of work, faculty members at the institutions visited felt invigorated by the change and revision of curriculum.

- E) The change to a primarily four-credit system will allow us to better achieve our goal of student success. While many factors influence retention and time to degree, a primarily four-credit system allows us the opportunity to improve student retention and reduce students' time to degree. Reducing students' time to degree completion is one way to decrease student indebtedness. **At Keene, retention and enrollment rates increased following the change to a four-credit system.** Additionally, a four-credit system would allow us to attract nontraditional students balancing the demands of school with family and work.
- F) Moving to a primarily four-credit model would make us not only a more attractive university for students and parents (as found at comparator institutions), but also for faculty. VPAA Julie Bernier reported in an email that several tenure-track candidates last year and at least one already this year turned down positions at PSU because "the load was too heavy." Instead, they went to institutions where the teaching load was either 3/3 or even 2/3. Elaine Doell from PSU's Human Resources department similarly reports that individuals have withdrawn from faculty searches because they were unable to negotiate release time for scholarly activity. UMF reported they became the 'first choice' for new faculty recruits and that the quality of their new faculty dramatically increased within the first year of the new curriculum. This would enhance our abilities to compete with other institutions, attracting and retaining faculty who are experts in their field, committed to student success and the mission of the university.
- G) PSU institutional researcher Scott Mantie raised several significant issues in regard to the connections between scheduling and campus 'culture.' For example, Tuesday/Thursday and Monday/ Wednesday formats may mean that on Friday, no classes are scheduled (e.g., Keene). Without significant weekend programming, students may see this as an opportunity to regularly leave campus. Of course, the so-called "open" days could be rotated or be midweek in order to alleviate current concerns about enrollment and attendance in Friday classes. Conversely, if well planned, "open" days could be time where the field, lab or outdoor experience portions of class are applied. UMF actually found their campus culture enriched by the four-credit model because students used the library more; they were engaged in outside-of-class activities with faculty like conferences, concerts, museum trips, etc.; and students had more time and interest in planning and developing on campus activities—both curricular and extra-curricular.

Mantie also reported that four-credit scheduling may provide access to academically pragmatic students (i.e. non-traditional, working/commuting) who must organize their schedules around coming to campus as infrequently as possible because of work/life obligations. Also, four-credit hour scheduling may permit larger blocks of time made available for student groups to meet.

H) Lastly a shift to a predominately 4-credit system will allow us to maximize and use most efficiently the physical and technological resources that we currently have. If managed properly, a 4-credit system could free up classroom space which under the current system is in short supply. Faculty and departments would have the flexibility to increase or develop online components or learning modules for courses instead of increasing seat time. This not only may

enhance learning opportunities, but provide a flexible course delivery medium for students and faculty.

2. How about our students? How will the four-credit switch benefit them?

The primary gain for students would come from a stronger academic experience and increased expectations. Reducing student course load while increasing academic rigor in each course would allow students to study topics in depth, giving them an opportunity to better focus their academic energies. Students will take fewer courses under a four-credit model; however, this does not necessarily mean less breadth or content. Faculty will be encouraged to re-conceptualize their courses to include more content, to bridge between two previously existing courses within one new course, and/or to provide more depth on a specific topic. As experts in their fields, faculty will determine the best way to deliver a quality education to their majors. It is impossible to learn everything, four-credit proponents argue. But it is possible for students to get a quality education, including solid grounding in a discipline, so that they themselves develop the skills and intellectual curiosity they need to pursue knowledge on their own. A four-credit curriculum, under which full-time students would have only four subjects to concentrate on at one time, would allow students the learning space to get the benefits of that education. Each course would have greater impact from having less competition for the students' attention, and for having more contact time and homework time for course material to sink in. Greater depth in each course, it is argued, would help students make the transition from passive, superficial acceptance of course material to active, creative connection making. Moreover, with added time to spend in each course on developing strengths in writing, public presentation, research, and technology, students would enter the workforce or graduate school better prepared for the diverse and changing demands of the 21st century economy. The increased focus should lead to a more satisfying experience for students while improving on the skills current students gain from a PSU education. Lastly, this increased focus should lead to more successful time to degree and less debt for our students (See Scott Mantie's report to the CMTF in the "Comparators" resource list at the end of this document).

3. This can't be all good for students. Are there any drawbacks for them?

Since students would take thirty-two rather than forty courses under the four-credit model, they would have fewer opportunities to explore different disciplines or add curricular options like minors, second majors, coaching certificates, etc. It is important to note, however, that even though, the total number of elective courses for each student would be reduced, the *proportion* of electives to required courses would not. In programs with majors in the 36-52 hour range, this would not be a significant problem, because students would still have as many as ten or eleven elective courses beyond general education. In other programs, we might try to create more flexibility for students by limiting the size of majors and by allowing students the opportunity to create options for themselves within the general education program. We may want to consider limiting the size of majors in part to respond to this concern.

4. OK, so the switch to 4 credits might strengthen academic quality at PSU. But what's in it for me as a faculty member?

- A) The first benefit that faculty should notice is the reduced course load (3/3 vs. 4/4). Even for FT faculty who teach one and two credit courses, under the 4-credit model, the number of unique courses any FT faculty would deliver per semester would be reduced. While the implementation would increase work for faculty during the implementation process, the overall benefit will be a reduction in number of courses per semester per FT faculty once the 4-credit model is fully implemented.
  - This shift does not imply a reduced workload, however. Overall, the number of student credit hours generated per faculty member should remain approximately the same. The CMTF recommends that the administration address the issue of workload separately from the credit model question.
- B) Faculty members will be able to work more intensively with fewer students to generate the same number of credit hours (See tables on p. 20-1). The reduction in course load combined with increasing academic expectation will hopefully create a more satisfying and balanced workload for faculty.
- C) The reduction in course load will allow for many additional benefits, similar to the benefits to the university. An increased focus on academic rigor and standards combined with fewer classes will create increased opportunity to work one-on-one with students (collaborative research, service learning) outside of the classroom as well as increased time for one-on-one feedback (through more elaborate comments on papers, assignments, homework, office hours, etc.).
- D) The reduction in course load will allow for better advising of students in different ways. While the initial shift will be demanding in terms of advising since faculty will need to create individualized plans for students in the transition period, ultimately the shift may ease advising and scheduling constraints overall. First, faculty may have more time and energy to devote to advising rather than just course scheduling once a semester. Second, restructuring of programs of study required with adoption of a 4-credit model may simplify advising through fewer courses required for graduation. Third, simplification of programs may allow faculty to utilize a developmental advising model rather than a scheduling task model.
- E) The switch to a four-credit system will also allow faculty to review and rethink their current curriculum within their respective departments. For departments who recently totally redesigned their curriculum for the new Gen Ed, a new credit model should be able to be adopted without dramatically shifting underlying philosophies.
- F) Focusing on three rather than four courses during the semester should allow faculty to better focus their academic energy (that is, you will have fewer things to think about in the shower) and create opportunities for increased student interaction, increased ability to innovate in classroom, and increased scholarship and research.
- G) Reduction in unique course preps and number of students per faculty member per semester under a 4-credit model will support intra-institutional faculty service. A 4-credit model may allow for the inclusion of service-learning activities within courses thereby supporting the institutional commitment to local and regional community service by faculty and students. Block scheduling and fewer courses may allow for more flexibility in scheduling committee meetings and organizing university service (i.e., fewer 7am or 5pm meetings).
- H) A 4-credit model will encourage greater depth within a program of study and support engaging students in the construction of knowledge through undergraduate student

- scholarship. Faculty scholarship, for FT faculty pursuing externally or internally funded research/scholarship/creative endeavors, will be supported at .33 FTE (one(1) 4-credit course) in contrast to .25 FTE (one(1) 3-credit course) for research/scholarship/creative endeavors.
- I) While we in no way deny the creativity and excellence currently occurring in PSU classrooms, greater breadth within a course may encourage creativity and collaboration within departments and across disciplines. Implementation will require cooperation within and across departments to structure learning environments that value open and regular communications that are the foundation of trust, shared goals, and professional norms among teachers, administrators, students, parents, and community members.
  - 5. Wouldn't this mean larger intro and gen ed courses?

Not necessarily. None of the institutions we visited had to increase class sizes in order to move to a four-credit system, either because their courses had open seats under the 3-credit curriculum or because they added additional faculty. Kirsti Sandy, a professor in the KSC English Department, said in an email: "We did not have to increase our cap for any course, as we had open seats at all levels each year." UMF hired 10 new tenure-track faculty to meet specific needs in their curriculum.

There are many arguments that show PSU will not have to increase class size under a 4-credit system. In a previous review of the 3- vs. 4-credit models, PSU's Ed Wixom developed the following paradigm:

- Ø MYTH: Changing to a 4-Credit System (4CR) means that class size would need to increase.
- Ø FACT: Changing to a 4CR would *not* increase class size.

#### 3 Credit/Current System:

Professor Art Wood's Schedule:

Number of Students per Class	<b>Total Credits per Class</b>
25	75
25	75
25	75
25	75
100 Total Students	300 Total Credits Taught

Remember, 100 students need 1500 credits per semester. 1500 credits/75 credits per class=20 classes per semester. That's 5 full-time faculty members teaching four classes each.

#### 4 Credit System:

Professor Art Wood's Schedule:

Number of Students per Class	Total Credits per Class
25	100
25	100
25	100
75 Total Students	300 Total Credits Taught

Remember, 100 students need 1500 credits per semester. 1500 credits/100 credits per class=15 classes per semester. That's five full-time faculty members teaching three classes each. Thus, the SAME NUMBER of students are served (they receive the same number of credits) under the 4CR as the 3CR.

Here's another model. In a 3-credit system, if we divide 100 students into four cohorts/classes of 25 students each (A, B, C, D), we would need five faculty members (F) to teach them:

#### 3-Credit Model:

F1	F2	F3	F4	F5
A	A	В	С	D
A	В	В	С	D
A	В	С	С	D
A	В	С	D	D

That is, in our current system, F1 teaches four of the courses that cohort A needs. F2 teaches the fifth that A needs as well as three of the five that B needs and so on. Five faculty members can teach all of the classes that those 100 students need.

In the four-credit model, students still only need 120 credits (30 courses) to graduate, which means there will be TWO semesters where students will only need 12 credits, rather than 16. It looks like this:

#### 4-Credit Model:

F1	F2	F3	F4	F5
A	A	В	С	D
A	В	В	С	D
A	В	С	С	D

So group D only needs three classes each semester in one year to graduate and therefore, five faculty members can still teach all of the classes that these 100 students need.

However, the Task Force recognizes that it may be difficult to guarantee that students will only take 120 credits during their careers at PSU. In order to retain current average class sizes, we can administratively restrict students from taking more than 12 credits for two semesters, perhaps during the first year in order to reinforce the transition to college, focus, and retention; we can

add new faculty (the Task Force estimates we would need 13 new full-time faculty to meet the needs of a 4-credit model); or we can *minimally* increase class sizes.

Adjusting average class sizes is not a significant deterrent to the 4-credit model. Although many people think faculty would have to teach the same number of students in either system (i.e., 100), the reality is that by just increasing the average class size by **TWO** students we can dramatically affect enrollment issues

For example, if every student took 16 credit hours every semester for four years and we DID NOT increase the average class size or add more sections, the demand would be as follows in a 3- versus 4-credit model:

## Example A: 4000 Students

3 Credits	4 Credits
5 Classes Each	4 Classes Each
20,000 Seats Needed	16,000 Seats Needed
Each Faculty = 100 Seats	Each Faculty = 75 Seats
Need: 200 Faculty	Need: 213.33 Faculty

However, if we raise the average class size from 25 to 27, we see a significant difference:

#### Example B: 4000 Students

3 Credits	4 Credits
5 Classes Each	4 Classes Each
20,000 Seats	16,000 Seats
Each Faculty: 100 Seats	Each Faculty: 81 Seats
Need: 200 Faculty	Need: 197.53 Faculty

# Moving from 100 students per semester to 81 is a significant reduction in the number of students taught, thus affecting faculty workload.

The problem of having either too many introductory courses, or courses that are significantly larger, will likely only occur with courses that service other majors or the general education program. If the demand for a course is not going to decrease under a four-credit model, then the same number of students will need the course. This means that the number of sections of a particular course will stay the same, even as the total courses taught by that department decreases, or if fewer sections are taught, each section must be larger. The only way to avoid this is through a change in the demand for these service courses. General Education requirements could change, either to a matrices system where upper level courses in General Education are emphasized, or simply in a change in the distribution requirement that would lower demand for introductory courses. In cases where there is no alternative but to keep the same demand for a course as present, departments could either adjust the average class size minimally or add additional sections.

Faculty will be asked to develop curriculum outlines that will enable us to anticipate and address problems in this area. The Credit Model Task Force recommends the administration and

implementation team commit to hiring new tenure-track faculty to meet these needs, in addition to the five new positions Provost Bernier has already committed to in the coming years.

6. What would it mean for PSU to move to a four-credit curriculum? How would our approach to teaching and learning change under the new system?

Our first assumption is that our aim in moving to a four-credit system would be to **increase** academic standards and intellectual rigor by focusing student work each semester on four subjects instead of five. This is an opportunity to raise our expectations for student learning and intellectual engagement. Because students would be taking fewer courses, the new system would tend to favor depth over breadth, requiring that students do more intensive work in fewer areas each semester. The same calculation would apply to each major program: most students would take fewer courses in the major, but the expectation would be that these courses would be more substantial and more demanding than the courses we currently offer under the 3-credit system. In some programs, the new system might require a reconfiguration of existing courses, with the same material being presented in larger, more sustained course-blocs. In others, faculty might make a decision to cover fewer areas but to cover them in a more detailed and rigorous fashion, on the assumption that in-depth application of disciplinary approaches and methodologies is a more pressing pedagogical goal than broad coverage. In either case, individual courses would need to change and grow to meet their new role in the major. In relation both to the major program and to the student's work for the semester, then, individual courses would have to meet a substantially higher burden of expectations for student learning under a four-credit system.

Clearly, this burden cannot be met by an increase in class time alone—although the proposed new policy on class meeting time would provide for such an increase. Far more important, in our view, is the assumption that **the credit-hour increase from three to four should require a proportional increase in faculty expectations regarding student work.** Thus, as a rule of thumb, a four-credit course should require 33% more student work outside the classroom than a 3-credit course. In most cases, the implications of this additional expectation regarding student work outside of class would require thorough revision of current 3-credit courses rather than the addition of a few small requirements.

In designing four-credit courses, faculty will want to ask themselves what goals they have for student learning and growth in these courses and across the program and how the opportunity for additional student work in and out of class might further those goals. To help in this process, we offer three possible conceptual models for four-credit courses.

Model 1: Combination of Theory and Practice. Currently, faculty in foreign languages, the natural sciences, and mathematics offer four-credit courses in which students apply theoretical knowledge in a practical setting—the language resource center and the science laboratory, respectively. Along these same lines, many education courses currently include field work in the public schools. On the model of these disciplines, faculty might design discipline-appropriate modules for some courses, in which students would have the opportunity to put theoretical or abstract knowledge into practice. Such modules might include, for example, laboratory work in economics or psychology, studio work in the visual and performing arts, archaeological or sociological field work, service learning, or intensive hands-on research projects.

Model 2: Intensive Work on General Education Skills and Intellectual Abilities. Our general education program defines the development of student abilities in writing, research, presentation and technology as crucial features of a PSU education. The four-credit model might allow faculty to concentrate more explicitly on developing these abilities in appropriate disciplinary contexts. In developing four-credit courses, faculty might (for example): require more intensive writing, with greater use of re-writes and conferences to enable genuine growth in writing; devote class time to multiple public presentations and the development of presentation abilities; incorporate creative, original research projects, with support from the instructor at various stages; or improve student learning about technologies ranging from data manipulation programs to presentation software.

Within this model, student writing has a special place, since research has consistently shown that frequent "low-stakes" writing assignments enable cognitive development and improve intellectual understanding of content. The most widely-used writing-to-learn activities include assignments which allow students to record, explore, reflect, test informally, relate course materials to personal frames, and discover what they do or don't understand. Not surprisingly, these kinds of assignments also lead indirectly to improvements in polished ("high-stakes") writing. Thus the incorporation of additional writing assignments in our courses would both help students to grow as writers *and* improve their grasp of course materials. The four-credit model offers us an unusual opportunity to incorporate a wide range of writing assignments in our courses, and, indeed, to make writing-in-the disciplines activities a distinctive part of undergraduate education at PSU.

Model 3: Expanding Course Content. Finally, in some cases, our four-credit courses might define their departure from the 3-credit model primarily by virtue of their expanded content—that is, by virtue of the amount and complexity of the material they ask students to engage with. For example, a four-credit course might offer opportunities for in-depth knowledge and understanding of its subject by incorporating unusually long (or unusually complex and demanding) reading assignments, by covering a wide range of topics and concepts, by treating multiple examples, or by consistently making detailed and nuanced conceptual distinctions. In some programs, revised courses might incorporate material from other, dropped courses; in others, courses might expand their content to do justice to topics that were only superficially treated under the 3-credit model.

These models are abstractions, and they obviously do not exhaust the possibilities for developing four-credit courses. Faculty may choose, in developing new and revised four-credit courses, to combine features of all three models or to structure courses in a completely different way. Nevertheless, we offer these models as examples of the structures faculty might use as they imagine their new courses *and* of the kind of criteria the Curriculum Committee might use in evaluating course proposals under the new system. In each case, we should be asking, "How does this new course break with the standard 3-credit model? In what ways does it raise expectations for students? How does it demonstrate increased academic standards and intellectual rigor?"

7. How would this affect the classroom crunch?

As long as the percentage reduction in slots available in a new schedule grid (which would have longer periods) is not greater than the percentage reduction of course sections offered (we would offer fewer sections under this model), there should be no impact on the availability of classrooms. The Credit Model Task Force has prepared a sample schedule grid (see appendix at end of document) that demonstrates that it would easily be possible to offer an adequate number of slots. The earliest possible implementation date for a four-credit curriculum would be Fall, 2009

# 8. What will the policy be on class meeting time?

The Task Force recommends a standard of 180-200 minutes per week in class. This is based on research from other institutions; a majority of four-credit institutions have class meeting times ranging from 150 to 180 minutes, while a few meet 200 minutes or more each week. The task force engaged in cross-disciplinary discussions on this issue, and 200 minutes per week emerged as the best alternative. However, the task force recognizes that different disciplines or courses have different needs. Some disciplines or courses emphasize out of the classroom activity, time for individual research, and conferencing more than others; some require as much time in the classroom as possible. If faculty believe they need to meet for more than 180 minutes for a particular course, that will be possible, either through a 200 minute class meeting time schedule, or through the use of labs. In fact, many departments do this currently. For example, the Art department has been teaching two-hour 3-credit courses for years and is now moving to 3-hour four-credit courses in 2008-9. Also, some current four-credit Physics classes meet for 225 to 300 minutes per week. The issue under debate is credit hours, not necessarily contact hours, and we trust our colleagues to determine the most appropriate periods to meet their needs within the standardized schedule blocks provided.

## 9. *Is it 4 credits or nothing? What about 1-, 2-, 3-, and 5-credit courses?*

In order to maintain the integrity of the four-credit model for both students (four courses per semester) and faculty (three courses per semester), we should try to avoid five-credit and 3-credit courses. However, academic programs might want to explore creative ways to link separate two-credit courses; this would work best if two half-semester experiences could be linked. Academic credit would still be available for band, chorus, etc., possibly as a one- or two-credit option.

10. How will switching to 4 credits impact our education majors/teacher certification requirements or other departments subject to external accreditation bodies?

Jane Wellman's article, "Accreditation and the Credit Hour" analyzes three types of accrediting bodies and their input on credit hours: regional, national, and specialized. She concludes that, for the most part, regional agencies "leave it to the institution and specifically to the faculty of the institutions to determine the appropriate basis for the awarding of credit" (Wellman 66). National agencies mention more specific measures in determining credit measurement, and, in fact, "time measures are most common" (Wellman 66). The specialized accrediting agencies "make the least mention of credit units" (67). What was most interesting about Wellman's conclusions, however, was the following statement: "In evaluating what this analysis means in terms of the project's

research hypotheses, a particular interest was to understand if external oversight of the credit hour by accrediting agencies either provides a layer of external validation to the credit-hour system or becomes a barrier to academic reform. The answer is a qualified no" (Wellman 67). Instead, Wellman emphasizes that the majority of the agencies are focusing on 'learning outcomes' rather than 'time-based measures' in their analysis (67).

The Task Force in no way denies that this transition will be more difficult for some departments than others; however, certification requirements are not an obstacle to moving to a four-credit system. Certification requirements are changing and the curriculum, both in education and in the arts and sciences, will be changing to reflect the new certification requirements regardless of whether or not a four-credit system is adopted at PSU. In education, standards-based and performance-based systems encourage exactly the kind of curricular thinking and creativity this transition proposes. Rather than be limited by specific course requirements, faculty can design courses and curricula that best meet how they define an educated person in their field. Thus, this may be an opportune time to rethink the entire curriculum in the way that a switch to a four-credit system will require. As we think about how we might revise our courses we must keep in mind how the revised courses will enable our students to meet new state and other external requirements.

11. Will students have to pay more for the same education? And how will this impact university revenue?

As of right now, the Task Force has no intention of changing the graduation requirement from 120 hours, but this could be something the Implementation Team considers, at the faculty's request. Generally across higher education 120 credit hours is the minimum for graduation; many institutions require 128; some require as much as 136. Since PSU students pay a flat rate for tuition (i.e., the same price for 12-17 credit hours), the price of tuition should not increase because of the four-credit shift. However, tuition rates are subject to modification annually, and they depend on numerous factors that fall outside the four-credit debate. It is impossible to conclude how a four-credit system would affect overall institutional revenue. By itself, this is not the definitive variable. Tuition rates and the USNH allocation formula are the most important variables. Arguably if a four-credit system were to increase our distinctiveness in ways that are consistent with our mission and contribute to improvements in institutional quality (e.g., as measured by student retention and graduation rates), then PSU would benefit financially and qualitatively.

#### 12. How would we handle transfer students?

All institutions, including PSU, regularly negotiate the difference between 3- and 4-credit courses when reviewing transfer applications, so this shouldn't be a problem. When consulted, Mary Campbell confirmed that "Students coming to our 3-credit institution with four-credit courses are not disadvantaged." Faculty would continue to make judgments about how courses from other institutions map onto our curriculum. In general, students transferring in 3-credit courses in areas which match our four-credit requirements would be given credit for meeting the *requirement* but would only receive three credits toward graduation. (This currently happens already with students who transfer in a 3-credit course that meets a four-credit course in our

curriculum). Transfer students would still have to meet all credit hour requirements for the major and for graduation; as a result, they would in some cases have additional elective courses in the major or in their program as a whole. All three registrars from KSC, UMF, and St. Joseph's, including PSU's Mary Campbell, stated transferring credits from a 3-credit to four-credit curriculum or vice versa was not particularly problematic. In fact, UMF stated that transferring into a four-credit institution actually increases the likelihood of students having the freedom to take additional electives, thus alleviating any perceived loss of breadth in the curriculum. For more information regarding transferring credits within the USNH system, see NH Transfer.org.

In addition, **PSU** is the **ONLY USNH** institution **NOT** on a 4-credit system. Provost Bernier reports that many Granite State College students have declined transferring to PSU because "they felt for roughly the same cost and effort they could earn 4 credits, so it was not worth it to them." If changed to a four-credit curriculum, PSU may become a more attractive choice not only for new and transfer students but also for local New Hampshire students interested in taking a PSU Summer or Winterim course that will easily transfer to their USNH school.

13. What about students who transfer away from PSU to a school with 3-credit courses?

Just as students transferring into PSU might gain some elective flexibility, students transferring away from PSU to a 3-credit institution might *lose* some elective flexibility, since four-credit courses taken at PSU would likely only satisfy a 3-credit requirement at the new school. However, this is not likely to create serious problems; we currently deal with students transferring to PSU from four-credit institutions all the time, and they adapt to out curriculum without difficulty (Mary Campbell cited ENGL 401 First-year Writing from UNH satisfies our composition requirement as an example).

14. How would this change affect PSU students who start out under a 3-credit system but finish under the four-credit system?

Most of our comparators stated converting students' remaining requirements under the 3-credit curriculum into four-credit equivalents as tiring and time consuming, but not impossible. Advisors will need to meet with students to design individualized graduation plans mapping out under the new curriculum. While this will be initially demanding, once departments and the General Education Committee establish these guidelines and programs for transition students, it will become easier to apply these plans to remaining students. St. Joseph's College and UMF recently went through the switch to 4 credits and both provide excellent resources for PSU when undergoing this task.

15. This sounds like a whole pile of work. Will there be any resources for faculty development?

Yes. The Four-Credit Task Force has discussed this issue with Provost Bernier, who has committed to support equal to the general education transition costs. While it was not possible

for them to commit to specific dollar amounts, they recognize the need to support course development grants, faculty workshops, departmental retreats, compensated summer work, etc. The administration recognizes a need to prioritize discretionary funds toward this effort. In addition, they will aggressively seek support from the USNH System (as we link our curriculum reform efforts to their interest in the implementation of the Strategic Plan) and from foundations. Potential grant proposals are also possible.

16. I've heard that the administration is just waiting for the faculty to rubber stamp the 4-credit system, so isn't this a done deal?

This is not a done deal. If faculty do not approve moving to a four-credit system, it will not happen. We have been assured that the administration knows it cannot engage in major curricular change without faculty approval. What they ask is that we do our best to fairly and fully consider the proposal and not dismiss it out of hand due to a desire to simply maintain the status quo.

For its part, the Credit Model Task Force hopes that all faculty take time and think of what the four-credit model might mean for PSU students and faculty, discuss it with colleagues, keep an open mind about controversial issues (class meeting time, etc.), and choose what is best for the future of PSU. Toward that end, we have designed a process which is intended to engage faculty in a number of discussions and activities throughout the next month to insure that the April 2008 proposal reflects what faculty believe is the best possible curriculum model for PSU. If the faculty vote does not support the four-credit proposal, it will not be implemented. Thus the faculty should feel empowered both in the process of considering this proposal and in choosing whether or not to implement it.

#### Conclusion

The topic of switching to 4 credits is a complicated issue to discuss because so many related issues are intertwined: seat time, scheduling blocks, course repackaging, class size, and the logistics of implementation. Our Task Force found ourselves getting bogged down in details before we had asked and answered the fundamental pedagogical issues at the core of the question of making this switch. The more information we received from similar institutions who had recently made the transition, however, the more we were reassured that the important but peripheral issues related to implementing the change could be worked out without much problem. So we turned our attention back to the central issue: would a change from 3 to 4 credits ultimately improve the intellectual community here at PSU for our students and our faculty? We focused on several key proven benefits to the switch: supporting rigor in coursework; focusing faculty and student attention so as to maximize quality academic work time; decreasing preps for faculty so as to increase amount of time spent per class; decreasing the number of students a particular faculty member teaches in a semester, thereby increasing the amount of time available per student (a better student-teacher ratio has proven benefits for both faculty and students); improving our ability to attract and hire top-notch professors with a lower number of courses taught per semester; allowing for increased flexibility for curricular innovation, including service-learning, on-site and off-research, team-teaching, crossdisciplinary collaboration, etc. We believe there will be other important benefits for students and faculty in terms of extra- and co-curricular campus life and in terms of service to the university.

but we focused most of our attention on the question of whether the academic life of the institution would be best served by the switch to a 4-credit model. We believe strongly that it would be.

We know that PSU is just emerging from a time of transition: a new Gen Ed program, a new administration, and many new programs and departments on campus. We understand that many people have worked hard over the last few years to aid us as we moved into our new university identity. Despite the fact that we believe this will entail a solid year's worth of hard work, we believe there is enough energy in the faculty and administration to accomplish this task, and that the considerable long-term benefits make the work entirely worthwhile, and even exciting. Our careful research has led us to recommend to you that we make this switch, and we hope that after you study the available reports, charts, data, video transcripts, and pedagogical arguments, you will feel satisfied that the Task Force has provided you with ample proof that this switch is in the best interest of the intellectual life of our university.

# **Relevant Links and Additional Research**

# **History of Credit Models**

http://virtual.parkland.edu/todtreat/presentations/cetl03/shedd2003%20history%20of%20credit%20hour.pdf
http://www.samford.edu/groups/quality/BriefHistoryofAmericanAcademicCreditSystem.pdf

# Philosophy and Pedagogy of Credit Models

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The Student Credit Hour by Jane V. Wellman	Change, Jul/Aug2005, Vol. 37 Issue 4, p18-23, 6p, 3c; (AN 17540325)	
Reexamining the Sacrosanct Credit Hour by Jane V. Wellman & Thomas Ehrlich	http://chronicle.com/weekly/v50/i05/05b01601.htm	
The Credit Hour as a Potential Barrier to Innovation: Lessons from Innovation Institutions by Thomas Ehlrich.	New Directions for Higher Education, n122 p31-43 Sum 2003.	
The Credit Committee Report, University of Richmond, 2006.	http://provost.richmond.edu/committees/credit_report2.pdf	
Credit Hour Loads and College Onset and Subsequent Academic Performance: A Multi-Institutional Pilot Project by James Duby and Laura Schartman.	http://www.eric.ed.gov/	

# **Seat Time**

Performance, not seat time, focus of new NCTE standards	Reading Today, Aug/Sep2000, Vol. 18 Issue 1, p14, 4/5p, 1bw; (AN 3464224)
Moving from seat time to mastery: One district's system by Kevin Castner & Lorraine Costella	Educational Leadership, Sep93, Vol. 51 Issue 1, p45, 4p, 1 chart, 4bw; ( <i>AN 9311240406</i> )
5 Dirty Little Secrets in Higher Education by Laura Palmer Noone & Craig Swenson (see Secret #5)	http://www.educause.edu/ir/library/pdf/erm0161.pdf

# **Accreditation Issues**

Accreditation and the Credit Hour by Jane V.	New Directions for Higher Education, Summer2003 Issue
Wellman (see below for brief summary)	122, p57, 13p; (AN 10467004)

# **Comparator Institutions**

University of Maine 4 Credit Site	A great site describing the UMF conversion from 3 to 4 credits. See especially sections on defining the 4-credit course, faculty debates, letter from Theo Kalikow, and curricular outlines by major. HIGHLY RECOMMENDED.
Keene State College English Department 4- Credit Proposal (Word doc)	85-page proposal to change the English Department curriculum from a 3- to 4-credit model (implemented in 2003): Thanks to KSC English Dep't Chair Mark Long for sharing this document.
Keene State College Assessment	Document prepared by English Department after departmental implementation of 4-credit system: Thanks to KSC English Dep't Chair Mark Long for sharing this document.
Comparisons: Some Four-Credit Schedules from Public and Private Colleges	>From the UMaine Farmington site, a look at a number of schools and how they handle seat time and scheduling.
PSU Comparators	A document prepared by Phil Lonergan for the CMWG: a brief look at credit models at our official comparator institutions.
Three vs. Four Credit Hour Study	Scott Mantie, Associate Dean for Institutional Research & Assessment, reported to the CMTF on time to degree and retention issues in November, 2007.
NH Transfer.org	A website explaining the process of transferring credits within the USNH system, including research data on transfer statistics from 2005-7 within institutions.

# **Connections with Technology-Related Issues**

For Quality and Cost Effectiveness, Build a  Hybrid Program by Jennifer Patterson  Lorenzetti	Distance Education Report, 11/1/2004, Vol. 8 Issue 21, p1-7, 3p; (AN 14967144)
Teaching Time: Distance Education Versus Classroom Instruction by Diane M. Bender, Jeanneane B. Wood, & Jon D. Vredevood	American Journal of Distance Education, Jul2004, Vol. 18 Issue 2, p103-114, 12p, 5 charts; (AN 13713210)

# **Other Relevant Links**

The Carnegie Unit: What Is it?	Carnegie Foundation site that explains the history of the unit and the foundation's current position.
Carnegie Units	A provocative chart about the Carnegie Unit.
How the Student Credit Hour Shapes Higher Education: The Tie That Binds	A useful book, available at Lamson Library. Read an excerpt <u>here</u> .
Measuring the Credit Hour	A blog entry by a Seton Hill University professor.
Faculty Workload: An Integrated Model	A site from Arizona State University. See especially "The Integration of Faculty Responsibilities and

	Institutional Needs" (Krahenbul) from this site.
Faculty Workload Studies: Perspectives, Needs, and Future Directions	A 1998 survey by Katrina A. Meyer (George Washington U), from the ERIC Clearinghouse on Higher Education.
Lives In The Balance: Compensation, Workloads And Program Implications	2003 article by Donna Euban for the AAUP.
School Districts Can Now Offer Different Calendars	NHPR Report: "New rules recently passed by the State Board of Education could open the door for districts to have year-round school, an extended school day, or even a shortened school week."
The University System	An article by PSU professor Joe Monninger, written for the Valley News, regarding faculty workload and equity issues.
Report to the PSU English Department on 4- Credit Courses by Robin Bowers	http://oz.plymouth.edu/~rderosa/Bowers.pdf
Sample Scheduling Grids	Two sample scheduling grids from the UMF website.

# **Acknowledgments**:

The Credit Model Task Force would like to acknowledge the assistance of the many people who helped with this research and report, including:

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## Thanks to all of the PSU Faculty who Participated in the 2006-7 Four-Credit Discussion

Pat Cantor Michelle Fistek
John Kulig Terry Downs
John Krueckeberg Bob Heiner
Duncan McDougall Dennis Machnik
Kathleen Arecchi Marcia Schmidt Blaine

Eric Hoffman Joel Funk
Scott Coykendall Cynthia Vascak
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